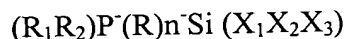


WHAT IS CLAIMED IS:

1. (Original) A material for forming copper undercoat films, characterized by comprising the compound represented by general formula (1) below:

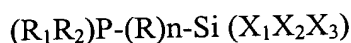
General formula (I)



(In general formula 1, at least one of X_1 , X_2 and X_3 is a hydrolytic group, R_1 and R_2 are alkyl groups, R denotes a chain-form organic group formed from alkyl groups, aromatic rings or alkyl groups containing aromatic rings, and n is an integer from 1 to 6.)

2. (Original) A material for forming copper undercoat films, characterized by comprising compound represented by general formula (1) below:

General formula (I)



(In general formula 1, at least one of X_1 , X_2 and X_3 is selected from a group comprising halogens, alkoxide groups, amino groups and isocyanate groups, R_1 and R_2 are alkyl groups with carbon numbers of 1-21, R has a carbon number of 1-50, and denotes a chain-form organic group formed from alkyl groups, aromatic rings or alkyl groups containing aromatic rings, and n is an integer from 1 to 6.)

3. (Original) The material for forming copper undercoat films according to claim 1 or 2, characterized by being a material for forming copper undercoat films by virtue of the bonding of $(R_1R_2)P-(R)_n-Si$ groups to a substrate via Si-O bonding, and by comprising solvent and the compound represented by general formula (I).

4. (Original) The material for forming copper undercoat films according to any of claims 1-3, characterized in that the compound represented by general formula (I) is one or more substances selected from the group: 1-dimethylphosphino-2-triethoxysilylethane, 1-diethylphosphino-2-triethoxysilylethane, 1-diphenylphosphino-2-triethoxysilylethane, 1-dimethylphosphino-2-trimethoxysilylethane, 1-diethylphosphino-2-trimethoxysilylethane, 1-diphenylphosphino-2-trimethoxysilylethane, 1-dimethylphosphino-3-triethoxysilylpropane, 1-diethylphosphino-3-triethoxysilylpropane, 1-diphenylphosphino-3-triethoxysilylpropane, 1-diphenylphosphino-2-trichlorosilylethane, 1-diphenylphosphino-2-trisdimethylaminosilylethane, 1-diphenylphosphino-2-triisocyanatosilylethane and 1-diphenylphosphino-4-triethoxysilylethylbenzene.

5. (Original) The material for forming copper undercoat films according to any of claims 1-4, characterized in that the material for forming copper undercoat films is brought into contact with a substrate surface, thus forming a copper undercoat film.

6. (Original) The material for forming copper undercoat films according to any of claims 1-5, wherein the undercoat film is produced by the bonding of $(R_1R_2)P-(R)_n-Si$ groups to the substrate via Si-O bonding, and said undercoat film is [designed so that] the reaction between the $-Si(X_1X_2X_3)$ [groups] and $-OH$ [groups] at the substrate surface occurs in liquid phase.

7. (Original) The material for forming copper undercoat films according to any of claims 1-5, wherein the undercoat film is produced by the bonding of $(R_1R_2)P-(R)_n-Si$ groups to the

substrate via Si-O bonding, and said undercoat film is [designed so that] the reaction between the $-\text{Si}(\text{X}_1\text{X}_2\text{X}_3)$ [groups] and $-\text{OH}$ [groups] at the substrate surface occurs in gas phase.

8. (Original) The material for forming copper undercoat films according to any of claims 1-5, wherein the undercoat film is produced by the bonding of $(\text{R}_1\text{R}_2)-(\text{R})_n\text{-Si}$ groups to the substrate via Si-O bonding, and said undercoat film is [designed so that] the reaction between the $-\text{Si}(\text{X}_1\text{X}_2\text{X}_3)$ [groups] and $-\text{OH}$ [groups] at the substrate surface occurs in a supercritical liquid.

9. (Original) The material for forming copper undercoat films according to any of claims 1-8, characterized in that the reaction between the $-\text{Si}(\text{X}_1\text{X}_2\text{X}_3)$ [groups] and $-\text{OH}$ [groups] at the substrate surface is carried out under the condition of room temperature to 450 °C.

(Detailed description of the invention)

(Technological field of the invention)

The present invention relates to a material for forming copper undercoat films.

(Problem to be solved by the invention)